

**WHAT IS CLAIMED IS:**

1. A method for adjusting dot-gain for a halftone binary bitmap file comprising:
  - a) inputting a halftone binary bitmap file consisting of binary pixels to a digital filter;
  - b) filtering the binary pixels with the digital filter and generating a weighted sum of the pixels;
  - c) producing a multilevel pixel from the weighted sum;
  - d) comparing the multilevel pixel to a preset level and generating a binary pixel output; and
  - e) collecting the binary pixel output and forming an adjusted halftone binary bitmap file.
2. The method of claim 1, wherein the digital filter is a blur filter, an edge enhancement filter, an averager filter, a high pass filter, a lower pass filter, or a band pass filter.
3. The method of claim 1, wherein the halftone binary bitmap file is generated by a raster image processor.
4. The method of claim 1, wherein the halftone binary bitmap file is generated from a high resolution scan of a halftone film.
5. The method of claim 1, wherein the halftone binary bitmap file is at a resolution of between 600 dpi and 6000 dpi.
6. The method of claim 5, wherein the halftone binary bitmap file is at a resolution of between 1800 dpi and 3000 dpi.
7. The method of claim 1, wherein the preset level is determined by the color separation that the halftone binary bitmap file represents.

8. The method of claim 1, wherein the halftone binary bitmap file will have been processed at a halftone binary bitmap screen ruling and a halftone binary bitmap screen angle.

9. The method of claim 1, wherein the preset level is determined by a halftone binary bitmap screen ruling.

10. The method of claim 1, wherein the preset level is determined by a halftone bitmap screen angle.

11. A method for adjusting dot-gain for a halftone binary print comprising the steps of:

- a) inputting a halftone binary bitmap file consisting of binary pixels to a digital filter;
- b) filtering the binary pixels with the digital filter and generating a weighted sum of the pixels;
- c) producing a multilevel pixel from the weighted sum;
- d) comparing the multilevel pixel to a preset level and generating a binary pixel output;
- e) collecting the binary pixel output and forming an adjusted halftone binary bitmap file; and
- f) printing the halftone binary bitmap file.

12. The method of claim 11, wherein the digital filter is a blur filter, an edge enhancement filter, an averager filter, a high pass filter, a lower pass filter, or a band pass filter.

13. The method of claim 11, wherein the halftone binary bitmap file is generated by a raster image processor.

14. The method of claim 11, wherein the halftone binary bitmap file is generated from a high resolution scan of a halftone film.

15. The method of claim 11, wherein the halftone binary bitmap file is at a resolution of between 600 dpi and 6000 dpi.

16. The method of claim 15, wherein the halftone binary bitmap file is at a resolution of between 1800 dpi and 3000 dpi.

17. The method of claim 11, wherein the preset level is determined by the color separation that the halftone binary bitmap file represents.

18. The method of claim 11, wherein the halftone binary bitmap file will have been processed at a halftone binary bitmap screen ruling and a halftone binary bitmap screen angle.

19. The method of claim 11, wherein the preset level is determined by a halftone binary bitmap screen ruling.

20. The method of claim 11, wherein the preset level is determined by a halftone bitmap screen angle.

21. A method for adjusting dot-gain for a printing plate comprising the steps of:

- a) inputting a halftone binary bitmap file consisting of binary pixels to a digital filter;
- b) filtering the binary pixels with the digital filter generating a weighted sum of the pixels;
- c) producing a multilevel pixel from the weighted sum;
- d) comparing the multilevel pixel to a preset level and generating a binary pixel output;
- e) collecting the binary pixel output and forming an adjusted halftone binary bitmap file; and

f) exposing a printing plate to the adjusted halftone binary bitmap file.

22. The method of claim 21, wherein the digital filter is a blur filter, an edge enhancement filter, an averager filter, a high pass filter, a lower pass filter, or a band pass filter.

23. The method of claim 21, wherein the halftone binary bitmap file is generated by a raster image processor.

24. The method of claim 21, wherein the halftone binary bitmap file is generated from a high resolution scan of a halftone film.

25. The method of claim 21, wherein the halftone binary bitmap file is at a resolution of between 600 dpi and 6000 dpi.

26. The method of claim 25, wherein the halftone binary bitmap file is at a resolution of between 1800 dpi and 3000 dpi.

27. The method of claim 21, wherein the preset level is determined by the color separation that the halftone binary bitmap file represents.

28. The method of claim 21, wherein the halftone binary bitmap file will have been processed at a halftone bitmap screen ruling and a halftone binary bitmap screen angle.

29. The method of claim 21, wherein the preset level is determined by a halftone binary bitmap screen ruling.

30. The method of claim 21, wherein the preset level is determined by a halftone bitmap screen angle.